Installation Aspects of the Third Harmonic Cavity and Superconducting Wiggler at Elettra

D. Bulfone, A. Gambitta, D. Morelli, G. Penco

Sincrotrone Trieste, in Area Science Park, S.S. 14 Km 163.5, 34012 Trieste, Italy Phone: + 39 - (0)40 - 3758676; Fax: + 39 - (0)40 - 3758565 E-mail: alessandro.gambitta@elettra.trieste.it

Abstract

New cryogenic devices are going to be installed in the Elettra storage ring during the summer of 2002. The third harmonic cavity will increase the performance of the storage ring by increasing the beam lifetime, while the superconducting wiggler has been designed for a new high-energy high-flux diffraction beamline. Both of these devices are cryogenically cooled at 4 K, requiring liquid He circuits. In this contribution solution of problems related to installation (layout, vacuum chambers, cooled masks, cryogenic plants, etc.) will be presented.

Keywords: cryogenic instrumentation, rf cavity, wiggler

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